

1 ROB BONTA
Attorney General of California
2 MARK R. BECKINGTON
Supervising Deputy Attorney General
3 ROBERT L. MEYERHOFF
Deputy Attorney General
4 State Bar No. 298196
300 South Spring Street, Suite 1702
5 Los Angeles, CA 90013-1230
Telephone: (213) 269-6177
6 Fax: (916) 731-2144
E-mail: Robert.Meyerhoff@doj.ca.gov
7 *Attorneys for Defendant Rob Bonta in his*
official capacity as Attorney General of the
8 *State of California*

9 IN THE UNITED STATES DISTRICT COURT
10 FOR THE SOUTHERN DISTRICT OF CALIFORNIA
11 CIVIL DIVISION
12

13 **VIRGINIA DUNCAN, RICHARD**
14 **LEWIS, PATRICK LOVETTE,**
15 **DAVID MARGUGLIO,**
16 **CHRISTOPHER WADDELL, and**
CALIFORNIA RIFLE & PISTOL
ASSOCIATION, INC., a California
corporation,

17 Plaintiffs,

18 v.

19 **ROB BONTA, in his official capacity as**
20 **Attorney General of the State of**
21 **California; and DOES 1-10,**

22 Defendants.
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Case No. 17-cv-1017-BEN-JLB

**SUPPLEMENTAL
DECLARATION OF LUCY P.
ALLEN**

Courtroom: 5A
Judge: Hon. Roger T. Benitez
Action Filed: May 17, 2017

1 **SUPPLEMENTAL DECLARATION OF LUCY ALLEN**

2 I, Lucy P. Allen, declare under penalty of perjury under the laws of the
3 United States that the information in this declaration is true:

4 1. I previously submitted a declaration in connection to the Attorney
5 General's Opposition to Plaintiffs' Motion for Preliminary Injunction, which was
6 filed with this Court on June 5, 2017 (the "2017 Declaration"), and an expert report
7 filed with this Court on April 9, 2018 (the "2018 Report").¹ I make this
8 supplemental declaration providing additional data and analysis in connection to
9 Defendants' Supplemental Brief in Response to the Court's Order of September 26,
10 2022.

11 2. I am a Managing Director of NERA Economic Consulting ("NERA"),
12 a member of NERA's Securities and Finance Practice and Chair of NERA's Product
13 Liability and Mass Torts Practice. NERA provides practical economic advice related
14 to highly complex business and legal issues arising from competition, regulation,
15 public policy, strategy, finance, and litigation. NERA was established in 1961 and
16 now employs approximately 500 people in more than 20 offices worldwide.

17 3. In my over 25 years at NERA, I have been engaged as an economic
18 consultant or expert witness in numerous projects involving economics and statistics.
19 I have been qualified as an expert and testified in court on various economic and
20 statistical issues relating to the flow of guns into the criminal market. I have testified
21 at trials in Federal and State Courts, before the New York City Council Public Safety
22 Committee, the American Arbitration Association and the Judicial Arbitration
23 Mediation Service, as well as in depositions.

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28 ¹ My 2018 Report was marked as Exhibit 1 to the Declaration of John
Echeverria and filed in this matter at Docket Number 53-4.

4. I have an A.B. from Stanford University, an M.B.A. from Yale University, and M.A. and M. Phil. degrees in Economics, also from Yale University. Prior to joining NERA, I was an Economist for both President George H. W. Bush's and President Bill Clinton's Council of Economic Advisers. My resume with recent publications and testifying experience is included as Exhibit A.

5. This declaration reports the results of my analyses with respect to the following issues: (a) the number of rounds of ammunition fired by individuals using a gun in self-defense; and (b) the outcomes when large-capacity magazines are used in public mass shootings, including the associated number of casualties.

OPINIONS

A. Number of Rounds Fired by Individuals in Self-Defense

6. Plaintiffs claim the “large-capacity magazines” covered by California Penal Code section 32310 (which are magazines capable of holding more than ten rounds) are commonly used for lawful purposes, including for self-defense.²

7. The number of rounds commonly needed by individuals to defend themselves cannot be practically or ethically determined with controlled scientific experiments and there is no source that systematically tracks or maintains data on the number of rounds fired by individuals in self-defense. Due to these limitations, I have analyzed available data sources to estimate the number of rounds fired by individuals to defend themselves. In particular, I have analyzed data from the NRA Institute for Legislative Action, as well as my own study of news reports on incidents of self-defense with a firearm. In all, I have analyzed almost 1,000 incidents of self-defense

² See, for example, Complaint for Declaratory and Injunctive Relief, filed May 17, 2017, ¶¶2, 47.

1 with a firearm and found that it is rare for a person, when using a firearm in self-
2 defense, to fire more than ten rounds.

3 8. The NRA maintains a database of “Armed Citizen” stories describing
4 private citizens who have successfully defended themselves, or others, using a
5 firearm (“NRA Armed Citizen database”). According to the NRA, the “Armed
6 Citizen” stories “highlight accounts of law-abiding gun owners in America using
7 their Second Amendment rights to defend self, home and family.”³ Although the
8 methodology used to compile the NRA Armed Citizen database of stories is not
9 explicitly detailed by the NRA, the NRA Armed Citizen database is a useful data
10 source in this matter for at least three reasons. First, the Armed Citizen database was
11 the largest collection of accounts of citizen self-defense compiled by others that I was
12 able to find.⁴ Second, the incidents listed in the Armed Citizen database highlight the
13 very conduct that Plaintiffs claim the California law impedes (*i.e.*, the use of firearms
14 by law-abiding citizens for self-defense).⁵ Third, the Armed Citizen database is
15 compiled by an entity that actively opposes restrictions on magazine capacity and
16 restrictions on the possession and use of firearms in general.⁶ In light of the positions
17 taken by the entity compiling the data, I would expect that any selection bias would
18 be in favor of stories that put use of guns in self-defense in the best possible light and
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23 ³ NRA Institute for Legislative Action, Armed Citizens,
<https://www.nraila.org/gun-laws/armed-citizen/>, accessed May 28, 2017.

24 ⁴ Note that in 2020, after the time my research was conducted, The Heritage
25 Foundation began an online database of its own sample of defensive gun use
26 incidents (<https://datavisualizations.heritage.org/firearms/defensive-gun-uses-in-the-us>).

27 ⁵ Complaint for Injunctive and Declaratory Relief, May 17, 2017, ¶47.

28 ⁶ See, for example, NRA Civil Rights Defense Fund website,
<http://www.nradefensefund.org/current-litigation.aspx>, accessed October 12, 2018.

1 might highlight the apparent need of guns and/or multiple rounds in self-defense
2 incidents.

3 9. My team and I performed an analysis of incidents in the NRA Armed
4 Citizen database that occurred between January 2011 and May 2017.⁷ For each
5 incident, the city/county, state, venue (whether the incident occurred on the street, in
6 the home, or elsewhere) and the number of shots fired were tabulated.⁸ The
7 information was gathered for each incident from both the NRA synopsis and, where
8 available, an additional news story. An additional news story was found for over 95%
9 of the incidents in the NRA Armed Citizen database.

10 10. According to this analysis of incidents in the NRA Armed Citizen
11 database, it is rare for a person, when using firearms in self-defense, to fire more than
12 ten rounds. Out of 736 incidents, there were two incidents (0.3% of all incidents), in
13 which the defender was reported to have fired more than 10 bullets.⁹ Defenders fired
14 2.2 shots on average.¹⁰ In 18.2% of incidents, the defender did not fire any shots.

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18 ⁷ My collection and coding of the NRA Armed Citizen stories was last
19 performed in mid-2017.

20 ⁸ The following incidents were excluded from the analysis: (1) duplicate
21 incidents, (2) wild animal attacks, and (3) one incident where the supposed victim
22 later pleaded guilty to covering up a murder. When the exact number of shots fired
23 was not specified, we used the average for the most relevant incidents with known
24 number of shots. For example, if the story stated that “shots were fired” this would
indicate that at least two shots were fired and thus we used the average number of
shots fired in all incidents in which two or more shots were fired and the number of
shots was specified.

25 ⁹ Note that the only two incidents with more than 10 bullets fired were added
26 to the NRA Armed Citizen database in 2016 and 2017 after an earlier analysis that I
27 had conducted of the database had been submitted to and cited by the Court in
Kolbe v. O'Malley, Case No. CCB-13-2841 (Dkt. 79).

28 ¹⁰ Note that the analysis is focused on shots fired when using a gun in self-
(continued...)

1 These incidents highlight the fact that in many instances defenders are able to defend
2 themselves without firing any shots. For example, according to one of the incidents
3 in the NRA Armed Citizen Database:

4 “A man entered a Shell station in New Orleans, La. and attempted to rob a
5 cashier, by claiming he was carrying a gun. The cashier responded by
6 retrieving a gun and leveling it at the thief, prompting the criminal to flee. (The
7 Times Picayune, New Orleans, La. 09/02/15)”¹¹

9 11. For incidents occurring in the home (56% of total), defenders fired an
10 average of 2.1 shots, and fired no shots in 16.1% of incidents. For incidents occurring
11 outside the home (44%) of total, defenders fired an average of 2.2 shots, and fired no
12 shots in 20.9% of incidents.¹² The table below summarizes these findings:
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21 defense and therefore the average includes instances when no shots are fired. If one
22 calculates the average excluding incidents of self-defense with a gun without firing
shots, the average is still low, 2.6 shots when at least one shot is fired.

23 ¹¹ “Gas station clerk scares off robber,” NRA-ILA Armed Citizen, September
24 9, 2015.

25 ¹² A separate study of incidents in the NRA Armed Citizen database for an
26 earlier period (the five-year period from 1997 through 2001) found similar results.
27 Specifically, this study found that, on average, 2.2 shots were fired by defenders
28 and that in 28% of incidents of armed citizens defending themselves the individuals
fired no shots at all. See, Claude Werner, “The Armed Citizen – A Five Year
Analysis,” [http://gunssaveslives.net/self-defense/analysis-of-five-years-of-armed-
encounters-with-data-tables](http://gunssaveslives.net/self-defense/analysis-of-five-years-of-armed-encounters-with-data-tables), accessed January 10, 2014.

Number of Shots Fired in Self-Defense
Based on NRA Armed Citizen Incidents in the United States
January 2011 - May 2017

	Shots Fired by Individual in Self-Defense		
	Overall	Incidents in Home	Outside the Home
Average Shots Fired	2.2	2.1	2.2
Number of Incidents with No Shots Fired	134	66	68
Percent of Incidents with No Shots Fired	18.2%	16.1%	20.9%
Number of Incidents with >10 Shots Fired	2	2	0
Percent of Incidents with >10 Shots Fired	0.3%	0.5%	0.0%

Notes and Sources:

Data from NRA Armed Citizen database covering 736 incidents (of which 411 were in the home) from January 2011 through May 2017. Excludes duplicate incidents, wild animal attacks, and one incident where the supposed victim later pleaded guilty to covering up a murder.

12. We also performed the same analysis of the NRA Armed Citizen database limited to incidents that occurred in California. According to this analysis, defenders in California fired 2.0 shots on average. Out of 47 incidents, there were no incidents in which the defender was reported to have fired more than 10 bullets. In 27.7% of incidents, the defender did not fire any shots, and simply threatened the offender with a gun. For incidents occurring in the home (60% of total), defenders fired an average of 1.9 shots, and fired no shots in 32.1% of incidents. For incidents occurring outside the home (40% of total), defenders fired an average of 2.2 shots and fired no shots in 21.1% of incidents. The table below summarizes these findings for California:

**Number of Shots Fired in Self-Defense
Based on NRA Armed Citizen Incidents in California
January 2011 - May 2017**

	Shots Fired by Individual in Self-Defense		
	Overall	Incidents in Home	Outside the Home
Average Shots Fired	2.0	1.9	2.2
Number of Incidents with No Shots Fired	13	9	4
Percent of Incidents with No Shots Fired	27.7%	32.1%	21.05%
Number of Incidents with >10 Shots Fired	0	0	0
Percent of Incidents with >10 Shots Fired	0.0%	0.0%	0.0%

Notes and Sources:

Data from NRA Armed Citizen database covering 47 incidents in California (of which 28 were in the home) from January 2011 through May 2017. Excludes repeat stories, wild animal attacks and one incident where the supposed victim later pleaded guilty to covering up a murder.

13. In addition to our analysis of incidents in the NRA Armed Citizen database, we performed a systematic, scientific study of news reports on incidents of self-defense with a firearm in the home, focusing on the same types of incidents as the NRA stories and covering the same time period.¹³

14. To identify relevant news stories to include in our analysis, we performed a comprehensive search of published news stories using Factiva, an online news reporting service and archive owned by Dow Jones, Inc. that aggregates news content from nearly 33,000 sources.¹⁴ The search was designed to return stories about

¹³ This analysis was initially conducted to research issues regarding self-defense in the home, which was a focus before the 2022 *New York State Rifle & Pistol Association v. Bruen* Supreme Court decision. The analysis of the NRA Armed Citizen incidents described above indicates that the number of shots fired in self-defense outside the home is similar to those inside the home.

¹⁴ Factiva is often used for academic research. For example, a search for the (continued...)

1 the types of incidents that are the focus of the NRA Armed Citizen database and that
2 Plaintiffs claim the California law impedes – in particular, the use of firearms for
3 self-defense.¹⁵ The search identified all stories that contained the following keywords
4 in the headline or lead paragraph: one or more words from “gun,” “shot,” “shoot,”
5 “fire,” or “arm” (including variations on these keywords, such as “shooting” or
6 “armed”), plus one or more words from “broke in,” “break in,” “broken into,”
7 “breaking into,” “burglar,” “intruder,” or “invader” (including variations on these
8 keywords) and one or more words from “home,” “apartment,” or “property”
9 (including variations on these keywords).¹⁶ The search criteria match approximately
10 90% of the NRA stories on self-defense with a firearm in the home, and an analysis
11 of the 10% of stories that are not returned by the search shows that the typical number
12 of shots fired in these incidents was no different than in other incidents.¹⁷ The search
13 covered the same period used in our analysis of incidents in the NRA Armed Citizen
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18 term “Factiva” on Google Scholar yields over 28,000 results. As another example, a
19 search on Westlaw yields at least 83 expert reports that conducted news searches
20 using Factiva.

21 ¹⁵ NRA Institute for Legislative Action, Armed Citizens,
22 <https://www.nraila.org/gun-laws/armed-citizen/>, accessed May 28, 2017. See, also,
23 Complaint for Declaratory and Injunctive Relief, filed May 17, 2017, ¶47.

24 ¹⁶ The precise search string used was: (gun* or shot* or shoot* or fire* or
25 arm*) and (“broke in” or “break in” or “broken into” or “breaking into” or burglar*
26 or intrud* or inva*) and (home* or “apartment” or “property”). An asterisk denotes
27 a wildcard, meaning the search includes words which have any letters in place of
28 the asterisk. For example, a search for shoot* would return results including
“shoots,” “shooter” and “shooting.” The search excluded duplicate stories classified
as “similar” on Factiva.

¹⁷ The analysis and search would have used criteria to match actual incidents
involving Plaintiffs or California residents, but, based on the Complaint for
Injunctive and Declaratory Relief, Plaintiffs have not identified any incidents of the
type they claim the California law will impede.

1 database (January 2011 to May 2017). The region for the Factiva search was set to
2 “United States.” The search returned approximately 35,000 stories for the period
3 January 2011 to May 2017.¹⁸

4 15. Using a random number generator, a random sample of 200 stories was
5 selected for each calendar year, yielding 1,400 stories in total.¹⁹ These 1,400 stories
6 were reviewed to identify those stories that were relevant to the analysis, *i.e.*,
7 incidents of self-defense with a firearm in or near the home. This methodology
8 yielded a random selection of 200 news stories describing incidents of self-defense
9 with a firearm in the home out of a population of approximately 4,800 relevant
10 stories.²⁰ Thus, we found that out of the over 70 million news stories aggregated by
11 Factiva between January 2011 and May 2017, approximately 4,800 news stories were
12 on incidents of self-defense with a firearm in the home. We analyzed a random
13 selection of 200 of these stories.
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17 ¹⁸ The effect of using alternative keywords was considered. For example,
18 removing the second category (“broke in” or “break in” or “broken into” or
19 “breaking into” or burglar* or intrud* or inva*) and including incidents in which
20 the assailant was already inside the home and/or was known to the victim was
21 considered. *A priori*, there was no reason to believe that a larger number of shots
22 would be used in these incidents and based on an analysis of the NRA stories we
23 found that the number of shots fired in incidents when defending against someone
24 already in the home was not different than those with an intruder.

25 ¹⁹ The random numbers were generated by sampling with replacement.

26 ²⁰ The approximately 4,800 relevant news stories were estimated by
27 calculating the proportion of relevant news stories from the 200 randomly selected
28 stories each year and applying that proportion to the number of results returned by
the search for each year of the analysis. For example, in 2017, 33 out of 200 (17%)
randomly selected news stories involved incidents of self-defense with a firearm in
the home. Applying that proportion to the 1,595 results from the Factiva search in
2017 yields 263 relevant news stories in 2017. This process was repeated every
year to arrive at a total of 4,841 relevant news stories from 2011-2017.

1 16. For each news story, the city/county, state and number of shots fired
2 were tabulated. When tabulating the number of shots fired, we used the same
3 methodology as we used to analyze stories in the NRA Armed Citizen database.²¹
4 We then identified other stories describing the same incident on Factiva based on the
5 date, location and other identifying information, and recorded the number of times
6 that each incident was covered by Factiva news stories.

8 17. To determine the average number of shots fired *per incident*, we first
9 determined the average number of shots fired *per story* and then analyzed the number
10 of stories per incident. According to our study of a random selection from
11 approximately 4,800 relevant stories on Factiva describing incidents of self-defense
12 with a firearm in the home, the average number of shots fired per story was 2.61.
13 This is not a measure of the average shots fired *per incident*, however, because the
14 number of stories covering an incident varies, and the variation is not independent of
15 the number of shots fired. We found that there was a statistically significant
16 relationship between the number of shots fired in an incident and the number of news
17 stories covering an incident.²² We found that on average the more shots fired in a
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20 ²¹ When the exact number of shots fired was not specified, we used the
21 average for the most relevant incidents with known number of shots. For example,
22 if the story stated that “shots were fired” this would indicate that at least two shots
23 were fired and thus we used the average number of shots fired in all incidents in
24 which two or more shots were fired and the number of shots was specified.

25 ²² Based on a linear regression of the number of news stories as a function of
26 the number of shots fired, the results were statistically significant at the 1% level
27 (more stringent than the 5% level commonly used by academics and accepted by
28 courts. See, for example, Freedman, David A., and David H. Kaye, “Reference
Guide on Statistics,” *Reference Manual on Scientific Evidence* (Washington, D.C.:
The National Academies Press, 3rd ed., 2011), pp. 211-302, and Fisher, Franklin
M., “Multiple Regression in Legal Proceedings,” 80 *Columbia Law Review* 702
(1980).)

defensive gun use incident, the greater the number of stories covering an incident. For example, as shown in the table below, we found that incidents in Factiva news stories with zero shots fired were covered on average by 1.8 news stories, while incidents with six or more shots fired were covered on average by 10.4 different news stories.

**Average Number of News Stories by Number of Shots Fired
In Factiva Stories on Incidents of Self-Defense with a Firearm
January 2011 - May 2017**

Number of Shots Fired By Defender	Average Number of News Stories
0	1.8
1 to 2	2.8
3 to 5	3.8
6 or more	10.4

Notes and Sources:

Based on news stories describing defensive gun use in a random selection of Factiva stories between 2011 and May 2017 using the search string: (gun* or shot* or shoot* or fire* or arm*) and ("broke in" or "break in" or "broken into" or "breaking into" or burglar* or intrud* or inva*) and (home* or "apartment" or "property"), with region set to "United States" and excluding duplicate stories classified as "similar" on Factiva. Methodology for tabulation of shots fired as per footnote 16.

18. After adjusting for this disparity in news coverage, we find that the average number of shots fired per incident covered is 2.34.²³ Note that this

²³ The adjustment reflects the probability that a news story on a particular incident would be selected at random from the total population of news stories on incidents of self-defense with a firearm in the home. The formula used for the adjustment is:

$$\frac{\sum_{i=1}^n \left(\text{Shots Fired}_i \times \frac{R_i}{C_i} \right)}{\sum_{i=1}^n \left(\frac{R_i}{C_i} \right)}$$

where:

1 adjustment does not take into account the fact that some defensive gun use incidents
2 may not be picked up by *any* news story. Given the observed relationship that there
3 are more news stories when there are more shots fired, one would expect that the
4 incidents that are not written about would on average have fewer shots than those
5 with news stories. Therefore, the expectation is that these results, even after the
6 adjustment, are biased upward (*i.e.*, estimating too high an average number of shots
7 and underestimating the percent of incidents in which no shots were fired).
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9 19. As shown in the table below, according to the study of Factiva news
10 stories, in 11.6% of incidents the defender did not fire any shots, and simply
11 threatened the offender with a gun. In 97.3% of incidents the defender fired 5 or
12 fewer shots. There were no incidents where the defender was reported to have fired
13 more than 10 bullets.
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27 n = random selection of news stories on incidents of self-defense with a firearm in
the home

28 R_i = number of search results on Factiva in the calendar year of incident i

C_i = number of news stories covering incident i

**Number of Shots Fired in Self-Defense in the Home
Based on Random Selection of News Stories in Factiva
January 2011 - May 2017**

Estimated population of news reports in Factiva on self-defense with a firearm in the home	4,841
Random selection of news reports	200
Average Number of Shots Fired	2.34
Median Number of Shots Fired	2.03
Number of Incidents with No Shots Fired	23
Percent of Incidents with No Shots Fired	11.6%
Number of Incidents with ≤ 5 Shots Fired	195
Percent of Incidents with ≤ 5 Shots Fired	97.3%
Number of Incidents with >10 Shots Fired	0
Percent of Incidents with >10 Shots Fired	0.0%

Notes and Sources:

Based on news stories describing defensive gun use in a random selection of Factiva stories between 2011 and May 2017 using the search string: (gun* or shot* or shoot* or fire* or arm*) and ("broke in" or "break in" or "broken into" or "breaking into" or burglar* or intrud* or inva*) and (home* or "apartment" or "property"), with region set to "United States" and excluding duplicate stories classified as "similar" on Factiva. Methodology for tabulation of shots fired as per footnote 16. Number of incidents probability-weighted as per footnote 18.

20. In sum, an analysis of incidents in the NRA Armed Citizen database, as well as our own study of a random sample from approximately 4,800 news stories describing incidents of self-defense with a firearm, indicates that it is rare for a person, when using a firearm in self-defense, to fire more than ten rounds.

B. Public Mass Shootings

21. We analyzed the use of large-capacity magazines in public mass shootings using four sources for identifying public mass shootings: Mother Jones,²⁴ the Citizens Crime Commission of New York City,²⁵ the Washington Post²⁶ and the Violence Project.^{27, 28} The analysis focused on public mass shootings because it is my understanding that the state of California is concerned about public mass shootings and enacted the challenged law, in part, to address the problem of public mass shootings.

²⁴ “US Mass Shootings, 1982-2022: Data From Mother Jones’ Investigation,” Mother Jones, updated October 14, 2022, <http://www.motherjones.com/politics/2012/12/mass-shootings-mother-jones-full-data>.

²⁵ “Mayhem Multiplied: Mass Shooters and Assault Weapons,” Citizens Crime Commission of New York City, February 2018 update. Additional details on the mass shootings were obtained from an earlier source by the Citizens Crime Commission. “Mass Shooting Incidents in America (1984-2012),” Citizens Crime Commission of New York City, <http://www.nycrimecommission.org/mass-shooting-incidents-america.php>, accessed June 1, 2017.

²⁶ “The terrible numbers that grow with each mass shooting,” The Washington Post, updated May 12, 2021.

²⁷ “Mass Shooter Database,” The Violence Project, <https://www.theviolenceproject.org/mass-shooter-database/>, updated May 14, 2022.

²⁸ When I began research in 2013 on mass shootings, I found Mother Jones and Citizens Crime Commission to maintain the most comprehensive lists of relevant mass shootings. More recently, two additional sources, the Washington Post and The Violence Project, have compiled lists of public mass shootings. The Violence Project began work on its mass shootings database in September 2017 and its database first went online in November 2019, while the Washington Post first published its mass shootings database in February 14, 2018. There is substantial overlap between the mass shootings in all four sources. For example, the Mother Jones data contains 93% of the mass shootings in the Citizens Crime Commission data for the years covered by both data sources, 1984 to 2016, while the Washington Post contains 94% of the mass shootings in The Violence Project data for the years covered by both data sources, 1966 to 2019.

22. The type of incident considered a mass shooting is generally consistent across the four sources. In particular, all four sources consider an event a mass shooting if four or more people were killed in a public place in one incident, and exclude incidents involving other criminal activity such as a robbery.²⁹

²⁹ Citizen Crime Commission describes a mass shooting as “four or more victims killed” in “a public place” that were “unrelated to another crime (e.g., robbery, domestic violence).” Citizen Crime notes that its sources include “news reports and lists created by government entities and advocacy groups.” “Mayhem Multiplied: Mass Shooters and Assault Weapons,” Citizens Crime Commission of New York City, February 2018 update.

Mother Jones describes a mass shooting as “indiscriminate rampages in public places resulting in four or more victims killed by the attacker,” excluding “shootings stemming from more conventionally motivated crimes such as armed robbery or gang violence.” Although in January 2013 Mother Jones changed its definition of mass shooting to include instances when three or more people were killed, for this declaration we only analyzed mass shootings where four or more were killed to be consistent with the definition of the other three sources. “A Guide to Mass Shootings in America,” Mother Jones, updated October 14, 2022, <http://www.motherjones.com/politics/2012/07/mass-shootings-map>. See also, “What Exactly is a Mass Shooting,” Mother Jones, August 24, 2012, <http://www.motherjones.com/mojo/2012/08/what-is-a-mass-shooting>.

The Washington Post source describes a mass shooting as “four or more people were killed, usually by a lone shooter” excluding “shootings tied to robberies that went awry” and “domestic shootings that took place exclusively in private homes.” A The Washington Post notes that its sources include “Grant Duwe, author of ‘Mass Murder in the United States: A History,’ Mother Jones and Washington Post research,” as well as “Violence Policy Center, Gun Violence Archive; FBI 2014 Study of Active Shooter Incidents; published reports.” “The terrible numbers that grow with each mass shooting,” The Washington Post, updated May 12, 2021, <https://www.washingtonpost.com/graphics/2018/national/mass-shootings-in-america/>.

The Violence Project indicates that it uses the Congressional Research Service definition of a mass shooting: “a multiple homicide incident in which four or more victims are murdered with firearms—not including the offender(s)—within one event, and at least some of the murders occurred in a public location or locations in close geographical proximity (e.g., a workplace, school, restaurant, or

(continued...)

23. Each of the four sources contains data on mass shootings covering different time periods. The Mother Jones data covers 112 mass shootings from 1982 to October 13, 2022,³⁰ the Citizens Crime Commission data covers 80 mass shootings from 1984 to February 2018,³¹ the Washington Post data covers 185 mass shootings from 1966 to May 12, 2021,³² and The Violence Project data covers 182 mass shootings from 1966 to May 14, 2022.^{33, 34}

other public settings), and the murders are not attributable to any other underlying criminal activity or commonplace circumstance (armed robbery, criminal competition, insurance fraud, argument, or romantic triangle).” The Violence Project notes that its sources include “Primary Sources: Written journals / manifestos / suicide notes etc., Social media and blog posts, Audio and video recordings, Interview transcripts, Personal correspondence with perpetrators” as well as “Secondary Sources (all publicly available): Media (television, newspapers, magazines), Documentary films, Biographies, Monographs, Peer-reviewed journal articles, Court transcripts, Law Enforcement records, Medical records, School records, Autopsy reports.” “Mass Shooter Database,” The Violence Project, <https://www.theviolenceproject.org/methodology/>, accessed January 17, 2020.

³⁰ “A Guide to Mass Shootings in America,” Mother Jones, updated October 14, 2022, <http://www.motherjones.com/politics/2012/07/mass-shootings-map>. Excludes mass shootings where only three people were killed. Note this analysis of the Mother Jones data may not match other analyses because Mother Jones periodically updates its historical data.

³¹ “Mayhem Multiplied: Mass Shooters and Assault Weapons,” *Citizens Crime Commission of New York City*, February 2018 update.

³² “The terrible numbers that grow with each mass shooting,” *The Washington Post*, updated May 12, 2021, <https://www.washingtonpost.com/graphics/2018/national/mass-shootings-in-america/>.

³³ “Mass Shooter Database,” *The Violence Project* <https://www.theviolenceproject.org/mass-shooter-database/>, updated May 14, 2022.

³⁴ Note that I have updated this mass shooting analysis to include more recent incidents, as well as more recently available details. In my 2017 declaration in *Virginia Duncan et al. v. California Attorney General*, I included data on mass shootings through April 2017. In my 2018 declaration in *Rupp v. California Attorney General*, I updated the analysis to include data on mass shootings through

(continued...)

24. Note that the two more recently compiled sources of mass shootings, the Washington Post and The Violence Project, include additional mass shootings that were not covered by either Mother Jones or Citizens Crime Commission. In general, we found that these additional mass shootings were less covered by the media and involved fewer fatalities and/or injuries than the ones previously identified by Mother Jones or Citizens Crime Commission. For example, using the mass shooting data for the period 1982 through 2019, we found that the median number of news stories for a mass shooting included in Mother Jones and/or Citizen Crime Commission was 317, while the median for the additional mass shootings identified in the Washington Post and/or The Violence Project was 28.³⁵ In addition, we found an average of 21 fatalities or injuries for a mass shooting included in Mother Jones and/or Citizen Crime Commission, while only 6 fatalities or injuries for the additional mass shootings identified in the Washington Post and/or The Violence Project.

September 2018. The analyses in both of these declarations included mass shootings only from Mother Jones and the Citizen Crime Commission. In my 2020 declaration in *James Miller et al. v. California Attorney General*, I updated the analysis to include mass shootings through December 2019 and added mass shootings from two more sources, the Washington Post and the Violence Project. The number of mass shootings, as well as some details about the shootings, are not identical across these declarations for three main reasons. First, I have updated the analysis to include more recent incidents as well as more recently available details. Second, starting in 2020, I added two more sources (Washington Post and Violence Project), which include additional mass shootings and details not included in the initial sources. Third, even though Mother Jones included instances when three or more people were killed, for my declarations and reports starting in 2020, I only included mass shootings where four or more were killed to be consistent with the definition of the other three sources.

³⁵ The search was conducted over all published news stories on Factiva. The search was based on the shooter's name and the location of the incident over the period from one week prior to three months following each mass shooting.

1 25. We combined the data from the four sources for the period 1982 through
2 2019, and searched news stories on each mass shooting to obtain additional details
3 on the types of weapons used as well as data on shots fired where available. We
4 identified, based on this publicly available information, which mass shootings
5 involved the use of large-capacity magazines. See attached Exhibit B for a summary
6 of the combined data based on Mother Jones, Citizens Crime Commission, the
7 Washington Post, the Violence Project, and news reports.

9 **1. Use of large-capacity magazines in public mass shootings**

10 26. Based on the data through 2019, we found that large-capacity magazines
11 (those with a capacity to hold more than 10 rounds of ammunition) are often used in
12 public mass shootings. Magazine capacity is known in 105 out of the 161 mass
13 shootings (or 65%) considered in this analysis. Out of the 105 mass shootings with
14 known magazine capacity, 63 (or 60%) involved large-capacity magazines. Even
15 assuming the mass shootings with unknown magazine capacity *all* did not involve
16 large-capacity magazines, 63 out of 161 mass shootings or 39% of mass shootings
17 involved large capacity magazines. (See table below.)
18

19 27. Based on our analysis of the public mass shootings data through 2019,
20 casualties were higher in the mass shootings that involved weapons with large-
21 capacity magazines than in other mass shootings. In particular, we found an average
22 number of fatalities or injuries of 27 per mass shooting with a large-capacity
23 magazine versus 9 for those without. Focusing on just fatalities, we found an average
24 number of fatalities of 10 per mass shooting with a large-capacity magazine versus 6
25 for those without. (See table below.)
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**Numbers of Fatalities and Injuries in Public Mass Shootings
January 1982 - December 2019**

Weapon Used	# of Incidents	Average # of		
		Fatalities	Injuries	Total
LCM	63	10	17	27
Non-LCM	42	6	3	9
Unknown	56	5	3	7

Notes and Sources:

Casualty figures exclude the shooter. LCM classification and casualties based on review of stories from Factiva/Google searches.

28. In addition to the analysis using data through 2019 discussed above, we analyzed more recent mass shootings, including from January 2020 through October 2022.³⁶ Based on our analysis of this more recent data, we found similar results. In particular, we found casualties were higher in the mass shootings that involved weapons with large-capacity magazines than in other mass shootings. The table below summarizes these results using data for the period 1982 through October 2022.

³⁶ Note, however, that the Citizens Crime Commission data was last updated in February 2018 and the Washington Post was last updated in May 2021.

**Numbers of Fatalities and Injuries in Public Mass Shootings
January 1982 - October 2022**

Weapon Used	# of Incidents	Average # of		
		Fatalities	Injuries	Total
LCM	73	10	16	25
Non-LCM	42	6	3	9
Unknown	64	5	3	7

Notes and Sources:

Casualty figures exclude the shooter. LCM classification and casualties based on review of stories from Factiva/Google searches.

29. Our results are consistent with those of other studies that have analyzed mass shootings. Note that although the other studies are based on alternate sets of mass shootings, including covering different years and defining mass shootings somewhat differently, the results are similar in finding that fatalities and injuries are larger in mass shootings in which large capacity magazines are involved. A 2019 academic article published in the *American Journal of Public Health* by Klarevas et al. found that “[a]ttacks involving LCMs resulted in a 62% higher mean average death toll.”³⁷ This study found an average number of fatalities of 11.8 per mass shooting with a large-capacity magazine versus 7.3 for those without. The results in this study were based on 69 mass shootings between 1990 and 2017.³⁸ An analysis

³⁷ Louis Klarevas, Andrew Conner, and David Hemenway, “The Effect of Large-Capacity Magazine Bans on High-Fatality Mass Shootings, 1990–2017,” *American Journal of Public Health* (2019).

³⁸ The Klarevas et al. study defines mass shootings as “intentional crimes of gun violence with 6 or more victims shot to death, not including the perpetrators” and, unlike my analysis, does not exclude incidents in private places or incidents involving other criminal activity such as robbery.

1 of the mass shootings detailed in a 2016 article by Gary Kleck yielded similar results
2 (21 average fatalities or injuries in mass shootings involving large-capacity
3 magazines versus 8 for those without).³⁹ The Kleck study covered 88 mass shooting
4 incidents between 1994 and 2013.⁴⁰ In a 2018 study, Koper et al. found that mass
5 shootings involving assault weapons and large-capacity magazines resulted in an
6 average of 13.7 victims versus 5.2 for other cases.⁴¹ The Koper et al. study covered
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22 ³⁹ Kleck, Gary, “Large-Capacity Magazines and the Casualty Counts in Mass
23 Shootings: The Plausibility of Linkages,” 17 *Justice Research and Policy* 28
(2016).

24 ⁴⁰ The Kleck study defines a mass shooting as “one in which more than six
25 people were shot, either fatally or nonfatally, in a single incident.” See, Kleck,
26 Gary, “Large-Capacity Magazines and the Casualty Counts in Mass Shootings: The
Plausibility of Linkages,” 17 *Justice Research and Policy* 28 (2016).

27 ⁴¹ Koper et al., “Criminal Use of Assault Weapons and High-Capacity
28 Semiautomatic Firearms: an Updated Examination of Local and National Sources,”
Journal of Urban Health (2018).

145 mass shootings between 2009 and 2015.⁴² The table below summarizes their results.

Comparison of Studies on the Use of Large-Capacity Magazines in Mass Shootings						
Source	# Victims	Criteria Other Criteria	Time Period	# of Incidents	Avg. # of Fatalities + Injuries / Fatalities	
(1)	(2)	(3)	(4)	(5)	With LCM	Without LCM
Allen (2020) ¹	at least 4 <u>killed</u> ²	Includes shootings "in a public place in one incident, and exclude[s] incidents involving other criminal activity such as a robbery"	1982-2019	161	27 / 10	9 / 6
Kleck et al. (2016) ³	at least 6 <u>shot</u>	Excludes "spree shootings" and includes shootings in both "public" and "private" places	1994-2013	88	21 / n/a	8 / n/a
Klarevas et al. (2019) ⁴	at least 6 <u>killed</u> ²	Includes "intentional crimes of gun violence"	1990-2017	69	n/a / 12	n/a / 7
Koper et al. (2018) ⁵	at least 4 <u>killed</u> ²	Includes shootings in both public and private places	2009-2015	145	14 / n/a	5 / n/a

Notes and Sources:

¹ Declaration of Lucy P. Allen in Support of Defendants' Opposition to Motion for Preliminary Injunction in *James Miller et al. v. Xavier Becerra et al.*, dated January 23, 2020.

² Excluding shooter.

³ Kleck, Gary, "Large-Capacity Magazines and the Casualty Counts in Mass Shootings: The Plausibility of Linkages," 17 Justice Research and Policy 28 (2016).

⁴ Klarevas et al., "The Effect of Large-Capacity Magazine Bans on High-Fatality Mass Shootings 1990-2017," American Journal of Public Health (2019).

⁵ Koper et al., "Criminal Use of Assault Weapons and High-Capacity Semiautomatic Firearms: an Updated Examination of Local and National Sources," Journal of Urban Health (2018). Note that the Koper et al study includes shootings involving both LCM and assault weapons.

2. Number of rounds fired in public mass shootings with large-capacity magazines

30. In addition, the data indicates that it is common for offenders to fire more than ten rounds when using a gun with a large-capacity magazine in mass shootings. Of the 63 mass shootings we analyzed through 2019 that are known to have involved a large-capacity magazine, there are 43 in which the number of shots

⁴² The Koper et al. study defined mass shooting as "incidents in which four or more people were murdered with a firearm, not including the death of the shooter if applicable and irrespective of the number of additional victims shot but not killed."

1 fired is known. Shooters fired more than ten rounds in 40 of the 43 incidents, and the
2 average number of shots fired was 103.

3 31. Updating this analysis to include the 179 mass shootings through
4 October 2022 yields similar results. In particular, of the 73 mass shootings we
5 analyzed through 2022 that are known to have involved a large-capacity magazine,
6 there are 49 in which the number of shots fired is known. Shooters fired more than
7 ten rounds in 46 of the 49 incidents, and the average number of shots fired was 102.

9 **3. Percent of mass shooters' guns legally obtained**

10 32. The data on public mass shootings indicates that the majority of guns
11 used in these mass shootings were obtained legally.⁴³ Of the 161 mass shootings
12 analyzed through 2019, there are 100 where it can be determined whether the gun
13 was obtained legally. According to the data, shooters in 77% of mass shootings
14 obtained their guns legally (77 of the 100 mass shootings) and 79% of the guns used
15 in these 100 mass shootings were obtained legally (184 of the 234 guns). (Note that
16 even if one assumes that *all* of the mass shootings where it is not known were
17 assumed to be illegally obtained, then one would find 48% of the mass shootings and
18 61% of the guns were obtained legally.) Updating this analysis to use the 179 mass
19 shootings through 2022 yields similar results.⁴⁴
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25 ⁴³ The determination of whether guns were obtained legally is based on
26 Mother Jones and Washington Post reporting.

27 ⁴⁴ In particular, the 77% and 79% become 79% and 80% when updating the
28 analysis to include mass shootings through 2022. The 48% and 61% become 50%
and 62%.

1 Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury under the laws of
2 the United States of America that the foregoing is true and correct.

3 Executed on November 10, 2022, at New York, New York.
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Lucy Allen
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INDEX OF EXHIBITS

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EXHIBIT A

Exhibit A

LUCY P. ALLEN **MANAGING DIRECTOR**

Education

YALE UNIVERSITY

M.Phil., Economics, 1990

M.A., Economics, 1989

M.B.A., 1986

STANFORD UNIVERSITY

A.B., Human Biology, 1981

Professional Experience

- 1994-Present **National Economic Research Associates, Inc.**
Managing Director. Responsible for economic analysis in the areas of securities, finance and environmental and tort economics.
Senior Vice President (2003-2016).
Vice President (1999-2003).
Senior Consultant (1994-1999).
- 1992-1993 **Council of Economic Advisers, Executive Office of the President**
Staff Economist. Provided economic analysis on regulatory and health care issues to Council Members and interagency groups. Shared responsibility for regulation and health care chapters of the *Economic Report of the President, 1993*. Working Group member of the President's National Health Care Reform Task Force.
- 1986-1988 **Ayers, Whitmore & Company (General Management Consultants)**
1983-1984 Senior Associate. Formulated marketing, organization, and overall business strategies including:
Plan to improve profitability of chemical process equipment manufacturer.
Merger analysis and integration plan of two equipment manufacturers.
Evaluation of Korean competition to a U.S. manufacturer.
Diagnostic survey for auto parts manufacturer on growth obstacles.

Marketing plan to increase international market share for major accounting firm.

Summer 1985

WNET/Channel Thirteen, Strategic Planning Department

Associate. Assisted in development of company's first long-term strategic plan. Analyzed relationship between programming and viewer support.

1981-1983

Arthur Andersen & Company

Consultant. Designed, programmed and installed management information systems. Participated in redesign/conversion of New York State's accounting system. Developed municipal bond fund management system, successfully marketed to brokers. Participated in President's Private Sector Survey on Cost Control (Grace Commission). Designed customized tracking and accounting system for shipping company.

Teaching

1989- 1992

Teaching Fellow, Yale University

Honors Econometrics

Intermediate Microeconomics

Competitive Strategies

Probability and Game Theory

Marketing Strategy

Economic Analysis

Publications

"Snapshot of Recent Trends in Asbestos Litigation: 2022 Update," (co-author), NERA Report, 2022.

"Snapshot of Recent Trends in Asbestos Litigation: 2021 Update," (co-author), NERA Report, 2021.

"The Short-Term Effect of Goodwill Impairment Announcements on Companies' Stock Prices" (co-author), *International Journal of Business, Accounting and Finance*, Volume 14, Number 2, Fall 2020.

"Snapshot of Recent Trends in Asbestos Litigation: 2020 Update," (co-author), NERA Report, 2020.

"Snapshot of Recent Trends in Asbestos Litigation: 2019 Update," (co-author), NERA Report, 2019.

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“Trends and the Economic Effect of Asbestos Bans and Decline in Asbestos Consumption and Production Worldwide,” (co-author), *International Journal of Environmental Research and Public Health*, 15(3), 531, 2018.

“Snapshot of Recent Trends in Asbestos Litigation: 2017 Update,” (co-author), NERA Report, 2017.

“Asbestos: Economic Assessment of Bans and Declining Production and Consumption,” World Health Organization, 2017.

“Snapshot of Recent Trends in Asbestos Litigation: 2016 Update,” (co-author), NERA Report, 2016.

“Snapshot of Recent Trends in Asbestos Litigation: 2015 Update,” (co-author), NERA Report, 2015.

“Snapshot of Recent Trends in Asbestos Litigation: 2014 Update,” (co-author), NERA Report, 2014.

“Snapshot of Recent Trends in Asbestos Litigation: 2013 Update,” (co-author), NERA Report, 2013.

“Asbestos Payments per Resolved Claim Increased 75% in the Past Year – Is This Increase as Dramatic as it Sounds? Snapshot of Recent Trends in Asbestos Litigation: 2012 Update,” (co-author), NERA Report, 2012.

“Snapshot of Recent Trends in Asbestos Litigation: 2011 Update,” (co-author), NERA White Paper, 2011.

“Snapshot of Recent Trends in Asbestos Litigation: 2010 Update,” (co-author), NERA White Paper, 2010.

“Settlement Trends and Tactics” presented at Securities Litigation During the Financial Crisis: Current Development & Strategies, hosted by the New York City Bar, New York, New York, 2009.

“Snapshot of Recent Trends in Asbestos Litigation,” (co-author), NERA White Paper, 2009.

“China Product Recalls: What’s at Stake and What’s Next,” (co-author), NERA Working Paper, 2008.

“Forecasting Product Liability by Understanding the Driving Forces,” (co-author), *The International Comparative Legal Guide to Product Liability*, 2006.

“Securities Litigation Reform: Problems and Progress,” *Viewpoint*, November 1999, Issue No. 2 (co-authored).

“Trends in Securities Litigation and the Impact of the PSLRA,” Class Actions & Derivative Suits, American Bar Association Litigation Section, Vol. 9, No. 3, Summer 1999 (co-authored).

“Random Taxes, Random Claims,” Regulation, Winter 1997, pp. 6-7 (co-authored).

Depositions & Testimony (4 years)

Declaration before the United States District Court, Eastern District of Washington at Yakima, in *Brumback et al. v. Ferguson et al.*, 2022.

Trial Testimony before the Supreme Court of the State of New York, County of New York, in *MUFG Union Bank, N.A. (f/k/a Union Bank, N.A.) v. Axos Bank (f/k/a Bank of Internet USA), et al.*, 2022.

Supplemental Declaration before the United States District Court, Southern District of California, in *James Miller et al. v. California Attorney General et al.*, 2022.

Declaration before the United States District Court, Northern District of Texas, Dallas Division, in *Samir Ali Cherif Benouis v. Match Group, Inc., et al.*, 2022.

Deposition Testimony before the United States District Court for the Eastern District of Virginia, in *Plymouth County Retirement System, et al. v. Evolent Health, Inc., et al.*, 2022.

Deposition Testimony before the United States District Court for the Northern District of Georgia, in *Public Employees' Retirement System of Mississippi v. Mohawk Industries, Inc., et al.*, 2022.

Deposition Testimony before the United States District Court for the Southern District of New York, in *SEC v. AT&T, Inc. et al.*, 2022.

Deposition Testimony before the Superior Court of New Jersey, Hudson County, in *Oklahoma Firefighters Pension and Retirement System vs. Newell Brands Inc., et al.*, 2022.

Deposition Testimony before the United States District Court for the District of Pennsylvania, in *Allegheny County Employees, et al. v. Energy Transfer LP., et al.*, 2022.

Deposition Testimony before the United States District Court, District of Tennessee, in *St. Clair County Employees' Retirement System v. Smith & Acadia Healthcare Company, Inc., et al.*, 2022.

Deposition Testimony before the United States District Court, District of Colorado, in *Cipriano Correa, et al. v. Liberty Oilfield Services Inc., et al.*, 2022.

Deposition Testimony before the Superior Court of New Jersey, Hudson County, in *Oklahoma Firefighters Pension and Retirement System vs. Newell Brands Inc., et al.*, 2021.

Deposition Testimony before the Superior Court of New Jersey, Middlesex County, in *Dana Transport, Inc. et al., vs. PNC Bank et al.*, 2021.

Deposition Testimony before the United States District Court, Western District of North Carolina, in *Cheyenne Jones and Sara J. Gast v. Coca-Cola Consolidated Inc., et al.*, 2021.

Testimony and Deposition Testimony before the Court of Chancery of the State of Delaware in *Bardy Diagnostics Inc. v. Hill-Rom, Inc. et al.*, 2021.

Deposition Testimony before the United States Bankruptcy Court, Southern District of Texas, Houston Division, in *Natixis Funding Corporation v. Genon Mid-Atlantic, LLC*, 2021.

Testimony and Deposition Testimony before the United States District Court, Southern District of California, in *James Miller et al. v. Xavier Becerra et al.*, 2021.

Deposition Testimony before the Court of Chancery of the State of Delaware in *Arkansas Teacher Retirement System v. Alon USA Energy, Inc., et al.*, 2021.

Deposition Testimony before the United States District Court, Western District of Oklahoma, in *Kathleen J. Myers v. Administrative Committee, Seventy Seven Energy, Inc. Retirement & Savings Plan, et al.*, 2020.

Deposition Testimony before the United States District Court, Middle District of Tennessee, in *Nikki Bollinger Grae v. Corrections Corporation of America, et al.*, 2020.

Deposition Testimony before the Supreme Court of the State of New York, County of New York, in *MUFG Union Bank, N.A. (f/k/a Union Bank, N.A.) v. Axos Bank (f/k/a Bank of Internet USA), et al.*, 2020.

Declaration before the United States District Court for the Northern District of Georgia, in *Sunil Amin et al. v. Mercedes-Benz USA, LLC and Daimler AG*, 2020.

Deposition Testimony before the United States District Court, Western District of Washington at Seattle, in *In re Zillow Group, Inc. Securities Litigation*, 2020.

Declaration before the United States District Court for the Southern District of California in *James Miller et al. v. Xavier Becerra et al.*, 2020.

Deposition Testimony before the United States District Court, Middle District of Tennessee, in *Zwick Partners LP and Aparna Rao v. Quorum Health Corporation*, 2019.

Testimony and Declaration before the United States District Court, Southern District of Iowa, in *Mahaska Bottling Company, Inc., et al. v. PepsiCo, Inc. and Bottling Group, LLC*, 2019.

Declaration before the United States District Court Western District of Oklahoma in *In re: Samsung Top-Load Washing Machine Marketing, Sales Practices and Products Liability Litigation*, 2019.

Testimony before the United States District Court, Southern District of New York, in *Chicago Bridge & Iron Company N.V. Securities Litigation*, 2019.

Deposition Testimony before the United States District Court, Middle District of Florida, in *Jacob J. Beckel v. Fagron Holdings USA, LLC et al.*, 2019.

Deposition Testimony before the Clark County District Court of Nevada in *Round Square Company Limited v. Las Vegas Sands, Inc.*, 2018.

Deposition Testimony before the United States District Court, Middle District of Tennessee, in *Nikki Bollinger Grae v. Corrections Corporation of America et al.*, 2018.

Deposition Testimony before the District Court for the State of Nevada in *Dan Schmidt v. Liberator Medical Holdings, Inc., et al.*, 2018.

Deposition Testimony before the United States District Court, Northern District of Illinois, Eastern Division, in *In re the Allstate Corporation Securities Litigation*, 2018.

Deposition Testimony before the United States District Court, Central District of California, Southern Division, in *Steven Rupp et al. v. Xavier Becerra et al.*, 2018.

Declaration before the Superior Court of the State of Vermont in *Vermont Federation of Sportsmen's Club et al. v. Matthew Birmingham et al.*, 2018.

Testimony before the American Arbitration Association in *Arctic Glacier U.S.A, Inc. and Arctic Glacier U.S.A., Inc. Savings and Retirement Plan v. Principal Life Insurance Company*, 2018.

Deposition Testimony before the United States District Court, Southern District of New York, in *Marvin Pearlstein v. Blackberry Limited et al.*, 2018.

Deposition Testimony before the United States District Court, Eastern District of Texas, in *Alan Hall and James DePalma v. Rent-A-Center, Inc., Robert D. Davis, and Guy J. Constant*, 2018.

Deposition Testimony before the United States District Court, Southern District of Iowa, in *Mahaska Bottling Company, Inc., et al. v. PepsiCo, Inc. and Bottling Group, LLC*, 2018.

Testimony, Deposition Testimony and Declaration before the United States District Court, District of New Jersey, in *Association of New Jersey Rifle & Pistol Clubs, Inc. et al. v. Gurbir Grewal et al.*, 2018.

Deposition Testimony before the Supreme Court of the State of New York in *Bernstein Liebhard, LLP v. Sentinel Insurance Company, Ltd.*, 2018.

Deposition Testimony and Declarations before the United States District Court, Southern District of New York, in *Andrew Meyer v. Concordia International Corp., et al.*, 2018.

Deposition Testimony before the United States District Court, Southern District of California, in *Virginia Duncan, et al. v. Xavier Becerra, et al.*, 2018.

EXHIBIT B

Exhibit B
Public Mass Shootings Data
1982 – October 2022

Case	Location	Date	Source	Large Capacity Mag. ^a	Fatalities ^b	Injuries ^c	Total Fatalities & Injuries ^c	Shots Fired ^d	Gun(s) Obtained Legally? ^e	Offender(s)' Number of Guns
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)

18 mass shootings since Allen (2020):

1. Raleigh spree shooting	Heddingham, NC	10/13/22	MJ	-	5	2	7	-	-	2
2. Highland Park July 4 parade shooting	Highland Park, IL	7/4/22	MJ	Yes	7	48	55	83 ^{ba}	Yes	1
3. Tulsa medical center shooting	Tulsa, OK	6/1/22	MJ	-	4	9 ^{bb}	13 ^{bb}	37 ^{bc}	Yes	2
4. Robb Elementary School massacre	Uvalde, TX	5/24/22	MJ	Yes	21	17	38	315 ^{bd}	Yes	1 ^{be}
5. Buffalo supermarket massacre	Buffalo, NY	5/14/22	MJ/VP	Yes	10	3	13	60 ^{bf}	Yes	1
6. Sacramento County church shooting	Sacramento, CA	2/28/22	MJ	Yes	4	0	4	-	Yes ^{bg}	1
7. Oxford High School shooting	Oxford, MI	11/30/21	MJ/VP	Yes	4	7	11	30 ^{bh}	Yes ^{bi}	1
8. San Jose VTA shooting	San Jose, CA	5/26/21	MJ/VP	Yes	9	0	9	39 ^{bj}	Yes ^{bk}	3
9. Canterbury Mobile Home Park shooting	Colorado Springs, CO	5/9/21	WaPo	Yes	6	0	6	17 ^{bl}	-	1
10. FedEx warehouse shooting	Indianapolis, IN	4/15/21	MJ/VP/WaPo	Yes	8	7	15	-	Yes	2 ^{bm}
11. Orange office complex shooting	Orange, CA	3/31/21	MJ/VP/WaPo	-	4	1	5	-	-	1
12. Essex Royal Farms shooting	Baltimore County, MD	3/28/21	WaPo	-	4	1	5	-	Yes ^{bn}	1
13. King Soopers supermarket shooting	Boulder, CO	3/22/21	MJ/VP/WaPo	Yes	10	0	10	-	Yes	2
14. Atlanta massage parlor shootings	Atlanta, GA	3/16/21	MJ/VP/WaPo	Yes	8	1	9	-	Yes ^{bo}	1
15. Hyde Park shooting	Chicago, IL	1/9/21	WaPo	-	5	2	7	-	-	1
16. Englewood block party shooting	Chicago, IL	7/4/20	WaPo	-	4	4	8	-	-	-
17. Springfield convenience store shooting	Springfield, MO	3/15/20	MJ/VP/WaPo	-	4	2	6	-	Yes ^{bp}	2
18. Molson Coors shooting	Milwaukee, WI	2/26/20	MJ/VP/WaPo	-	5	0	5	12 ^{bq}	-	2 ^{br}

161 mass shootings in Allen (2020):

19. Jersey City Kosher Supermarket	Jersey City, NJ	12/10/19	MJ/VP/WaPo	-	4	3	7	-	Yes	5
20. Football-watching party	Fresno, CA	11/17/19	WaPo	-	4	6	10	-	-	2
21. Halloween Party	Orinda, CA	11/1/19	WaPo	-	5	0	5	-	-	1
22. Tequila KC bar	Kansas City, KS	10/6/19	WaPo	-	4	5	9	-	No	2
23. Midland-Odessa Highways	Odessa, TX	8/31/19	MJ/VP/WaPo	-	7	25	32	-	No	1
24. Dayton	Dayton, OH	8/4/19	MJ/VP/WaPo	Yes	9	27	36	41 ^f	Yes	1/2
25. El Paso Walmart	El Paso, TX	8/3/19	MJ/VP/WaPo	Yes	22	26	48	-	Yes	1

Exhibit B
Public Mass Shootings Data
1982 – October 2022

Case	Location	Date	Source	Large Capacity Mag. ^a	Fatalities ^b	Injuries ^c	Total Fatalities & Injuries ^c	Shots Fired ^d	Gun(s) Obtained Legally? ^e	Offender(s)' Number of Guns
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
26. Casa Grande Senior Mobile Estates	Santa Maria, CA	6/19/19	WaPo	-	4	0	4	-	-	1
27. Virginia Beach Municipal Center	Virginia Beach, VA	5/31/19	MJ/VP/WaPo	Yes	12	4	16	-	Yes	2
28. Henry Pratt Co.	Aurora, IL	2/15/19	MJ/VP/WaPo	-	5	6	11	-	No	1
29. SunTrust Bank	Sebring, FL	1/23/19	MJ/VP/WaPo	-	5	0	5	-	Yes	1
30. Borderline Bar & Grill	Thousand Oaks, CA	11/7/18	MJ/VP/WaPo	Yes	12	1	13	50 ^g	Yes	1
31. Tree of Life Synagogue	Pittsburgh, PA	10/27/18	MJ/VP/WaPo	-	11	6	17	-	Yes	4
32. T&T Trucking	Bakersfield, CA	9/12/18	MJ/VP/WaPo	No	5	0	5	-	-	1
33. Capital Gazette	Annapolis, MD	6/28/18	MJ/VP/WaPo	-	5	2	7	-	Yes	1
34. Santa Fe High School	Santa Fe, TX	5/18/18	MJ/VP/WaPo	No	10	13	23	-	-	2
35. Waffle House	Nashville, TN	4/22/18	MJ/VP/WaPo	-	4	4	8	-	Yes	1
36. Detroit	Detroit, MI	2/26/18	VP	-	4	0	4	-	-	-
37. Stoneman Douglas HS	Parkland, FL	2/14/18	CC/MJ/VP/WaPo	Yes	17	17	34	-	Yes	1
38. Pennsylvania Carwash	Melcroft, PA	1/28/18	MJ/VP/WaPo	-	4	1	5	-	-	3 ^h
39. Rancho Tehama	Rancho Tehama, CA	11/14/17	MJ/VP/WaPo	Yes	4	10	14	30 ⁱ	No	2
40. Texas First Baptist Church	Sutherland Springs, TX	11/5/17	CC/MJ/VP/WaPo	Yes	26	20	46	450 ^j	Yes	1
41. Las Vegas Strip	Las Vegas, NV	10/1/17	CC/MJ/VP/WaPo	Yes	58	422	480	1100 ^k	Yes	23
42. Taos and Rio Arriba counties	Abiquiu, NM	6/15/17	WaPo	No	5	0	5	-	-	1
43. Fiamma Workplace	Orlando, FL	6/5/17	CC/MJ/VP/WaPo	No	5	0	5	-	-	1
44. Marathon Savings Bank	Rothschild, WI	3/22/17	VP/WaPo	-	4	0	4	-	-	2
45. Club 66	Yazoo City, MS	2/6/17	VP/WaPo	-	4	0	4	-	-	1
46. Fort Lauderdale Airport	Fort Lauderdale, FL	1/6/17	CC/MJ/VP/WaPo	No	5	6	11	15 ^l	Yes	1
47. Cascade Mall	Burlington, WA	9/23/16	CC/MJ/VP/WaPo	Yes	5	0	5	-	-	1
48. Dallas Police	Dallas, TX	7/7/16	CC/MJ/VP/WaPo	Yes	5	11	16	-	Yes	3
49. Walgreens Parking Lot	Las Vegas, NV	6/29/16	WaPo	-	4	0	4	-	-	1
50. Orlando Nightclub	Orlando, FL	6/12/16	CC/MJ/VP/WaPo	Yes	49	53	102	110 ^m	Yes	2
51. Franklin Avenue Cookout	Wilkinsburg, PA	3/9/16	VP/WaPo	Yes	6	3	9	48 ⁿ	No	2
52. Kalamazoo	Kalamazoo County, MI	2/20/16	MJ/VP/WaPo	Yes	6	2	8	-	Yes	1
53. San Bernardino	San Bernardino, CA	12/2/15	CC/MJ/VP/WaPo	Yes	14	22	36	150 ^o	Yes	4

Exhibit B
Public Mass Shootings Data
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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
54. Tennessee Colony campsite	Anderson County, TX	11/15/15	VP/WaPo	-	6	0	6	-	-	1
55. Umpqua Community College	Roseburg, OR	10/1/15	CC/MJ/VP/WaPo	-	9	9	18	-	Yes	6
56. Chattanooga Military Center	Chattanooga, TN	7/16/15	CC/MJ/VP/WaPo	Yes	5	2	7	-	Yes	3
57. Charleston Church	Charleston, SC	6/17/15	CC/MJ/VP/WaPo	Yes	9	3	12	-	Yes	1
58. Marysville High School	Marysville, WA	10/24/14	CC/MJ/VP/WaPo	Yes	4	1	5	-	No	1
59. Isla Vista	Santa Barbara, CA	5/23/14	MJ/VP/WaPo	No	6	13	19	50 ^p	Yes	3
60. Alturas Tribal	Alturas, CA	2/20/14	MJ/VP/WaPo	-	4	2	6	-	-	2
61. Washington Navy Yard	Washington, D.C.	9/16/13	CC/MJ/VP/WaPo	No	12	8	20	-	Yes	2
62. Hialeah	Hialeah, FL	7/26/13	CC/MJ/VP/WaPo	Yes	6	0	6	10 ^q	Yes	1
63. Santa Monica	Santa Monica, CA	6/7/13	CC/MJ/VP/WaPo	Yes	5	3	8	70 ^r	Yes	2
64. Federal Way	Federal Way, WA	4/21/13	MJ/VP/WaPo	-	4	0	4	-	Yes	2
65. Upstate New York	Herkimer County, NY	3/13/13	MJ/VP/WaPo	-	4	2	6	-	Yes	1
66. Newtown School	Newtown, CT	12/14/12	CC/MJ/VP/WaPo	Yes	27	2	29	154	No	4/3
67. Accent Signage Systems	Minneapolis, MN	9/27/12	CC/MJ/VP/WaPo	Yes	6	2	8	46	Yes	1
68. Sikh Temple	Oak Creek, WI	8/5/12	CC/MJ/VP/WaPo	Yes	6	4	10	-	Yes	1
69. Aurora Movie Theater	Aurora, CO	7/20/12	CC/MJ/VP/WaPo	Yes	12	70	82	80	Yes	4
70. Seattle Café	Seattle, WA	5/30/12	CC/MJ/VP/WaPo	No	5	1	6	-	Yes	2
71. Oikos University	Oakland, CA	4/2/12	CC/MJ/VP/WaPo	No	7	3	10	-	Yes	1
72. Su Jung Health Sauna	Norcross, GA	2/22/12	MJ/WaPo	-	4	0	4	-	Yes	1
73. Seal Beach	Seal Beach, CA	10/14/11	CC/MJ/VP/WaPo	No	8	1	9	-	Yes	3
74. IHOP	Carson City, NV	9/6/11	CC/MJ/VP/WaPo	Yes	4	7	11	-	Yes	3
75. Akron	Akron, OH	8/7/11	VP	No	7	2	9	21 ^s	-	-
76. Forum Roller World	Grand Prairie, TX	7/23/11	WaPo	-	5	4	9	-	-	1
77. Grand Rapids	Grand Rapids, MI	7/7/11	CC	Yes	7	2	9	10	-	1
78. Family law practice	Yuma, AZ	6/2/11	WaPo	-	5	1	6	-	-	1
79. Tucson	Tucson, AZ	1/8/11	CC/MJ/VP/WaPo	Yes	6	13	19	33	Yes	1
80. Jackson	Jackson, KY	9/11/10	VP	No	5	0	5	12 ^t	-	-
81. City Grill	Buffalo, NY	8/14/10	VP/WaPo	-	4	4	8	10 ^u	-	1

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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
82. Hartford Beer Distributor	Manchester, CT	8/3/10	CC/MJ/VP/WaPo	Yes	8	2	10	11	Yes	2
83. Yoyito Café	Hialeah, FL	6/6/10	CC/VP/WaPo	No	4	3	7	9 ^v	-	-
84. Hot Spot Café	Los Angeles, CA	4/3/10	VP/WaPo	-	4	2	6	50 ^w	-	1
85. Coffee Shop Police	Parkland, WA	11/29/09	CC/MJ/VP/WaPo	No	4	0	4	-	No	2
86. Fort Hood	Fort Hood, TX	11/5/09	CC/MJ/VP/WaPo	Yes	13	32	45	214	Yes	1
87. Worth Street	Mount Airy, NC	11/1/09	VP/WaPo	-	4	0	4	16 ^x	No	1
88. Binghamton	Binghamton, NY	4/3/09	CC/MJ/VP/WaPo	Yes	13	4	17	99	Yes	2
89. Carthage Nursing Home	Carthage, NC	3/29/09	CC/MJ/VP/WaPo	No	8	2	10	-	Yes	2
90. Skagit County	Alger, WA	9/2/08	VP/WaPo	-	6	4	10	-	No	2
91. Atlantis Plastics	Henderson, KY	6/25/08	CC/MJ/VP/WaPo	No	5	1	6	-	Yes	1
92. Black Road Auto	Santa Maria, CA	3/18/08	VP/WaPo	-	4	0	4	17 ^y	-	1
93. Northern Illinois University	DeKalb, IL	2/14/08	CC/MJ/VP/WaPo	Yes	5	21	26	54	Yes	4
94. Kirkwood City Council	Kirkwood, MO	2/7/08	CC/MJ/VP/WaPo	No	6	1	7	-	No	2
95. Youth With a Mission and New Life Church	Colorado Springs, CO	12/9/07	VP/WaPo	Yes	4	5	9	25 ^z	-	3
96. Westroads Mall	Omaha, NE	12/5/07	CC/MJ/VP/WaPo	Yes	8	5	13	14	No	1
97. Crandon	Crandon, WI	10/7/07	CC/MJ/WaPo	Yes	6	1	7	30 ^{aa}	Yes	1
98. Virginia Tech	Blacksburg, VA	4/16/07	CC/MJ/VP/WaPo	Yes	32	17	49	176	Yes	2
99. Trolley Square	Salt Lake City, UT	2/12/07	CC/MJ/VP/WaPo	No	5	4	9	-	No	2
100. Amish School	Lancaster County, PA	10/2/06	CC/MJ/VP/WaPo	No	5	5	10	-	Yes	3
101. The Ministry of Jesus Christ	Baton Rouge, LA	5/21/06	VP/WaPo	-	5	1	6	-	-	1
102. Capitol Hill	Seattle, WA	3/25/06	CC/MJ/VP/WaPo	Yes	6	2	8	-	Yes	4
103. Goleta Postal	Goleta, CA	1/30/06	CC/MJ/VP/WaPo	Yes	7	0	7	-	Yes	1
104. Sash Assembly of God	Sash, TX	8/29/05	VP/WaPo	-	4	0	4	-	-	2
105. Red Lake	Red Lake, MN	3/21/05	CC/MJ/VP/WaPo	No	9	7	16	-	No	3
106. Living Church of God	Brookfield, WI	3/12/05	CC/MJ/VP/WaPo	Yes	7	4	11	-	Yes	1
107. Fulton County Courthouse	Atlanta, GA	3/11/05	VP/WaPo	-	4	0	4	-	No	1
108. Damageplan Show	Columbus, OH	12/8/04	CC/MJ/VP/WaPo	No	4	3	7	15 ^{ab}	Yes	1
109. Hunting Camp	Meteor, WI	11/21/04	CC/VP/WaPo	Yes	6	2	8	20	-	1

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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
110. ConAgra Foods Plant	Kansas City, KS	7/3/04	VP/WaPo	-	6	1	7	10 ^{ac}	-	2
111. Stateline Tavern	Oldtown, ID	10/24/03	VP/WaPo	Yes	4	0	4	14 ^{ad}	-	1
112. Windy City Warehouse	Chicago, IL	8/27/03	CC/VP/WaPo	No	6	0	6	-	-	-
113. Lockheed Martin	Meridian, MS	7/8/03	CC/MJ/VP/WaPo	-	6	8	14	-	Yes	5
114. Labor Ready	Huntsville, AL	2/25/03	VP/WaPo	-	4	1	5	-	-	1
115. Bertrand Products	South Bend, IN	3/22/02	VP/WaPo	-	4	2	6	-	-	2
116. Burns International Security	Sacramento, CA	9/10/01	VP/WaPo	Yes	5	2	7	200 ^{ae}	-	2
117. Bookcliff RV Park	Rifle, CO	7/3/01	VP/WaPo	No	4	3	7	6 ^{af}	-	1
118. Navistar	Melrose Park, IL	2/5/01	CC/MJ/VP/WaPo	Yes	4	4	8	-	Yes	4
119. Houston	Houston, TX	1/9/01	VP	-	4	0	4	-	-	-
120. Wakefield	Wakefield, MA	12/26/00	CC/MJ/VP/WaPo	Yes	7	0	7	37	Yes	3
121. Mount Lebanon	Pittsburgh, PA	4/28/00	VP/WaPo	No	5	1	6	-	Yes	1
122. Mi-T-Fine Car Wash	Irving, TX	3/20/00	VP/WaPo	-	5	1	6	-	-	-
123. Hotel	Tampa, FL	12/30/99	CC/MJ/VP/WaPo	No	5	3	8	-	Yes	2
124. Xerox	Honolulu, HI	11/2/99	CC/MJ/VP/WaPo	Yes	7	0	7	28	Yes	1
125. Wedgwood Baptist Church	Fort Worth, TX	9/15/99	CC/MJ/VP/WaPo	Yes	7	7	14	30	Yes	2
126. Atlanta Day Trading	Atlanta, GA	7/29/99	MJ/VP/WaPo	-	9	13	22	-	Yes	4
127. Albertson's Supermarket	Las Vegas, NV	6/3/99	VP/WaPo	-	4	1	5	-	-	1
128. Columbine High School	Littleton, CO	4/20/99	CC/MJ/VP/WaPo	Yes	13	23	36	188	No	4
129. New St. John Fellowship Baptist Church	Gonzalez, LA	3/10/99	VP/WaPo	-	4	4	8	-	-	1
130. Thurston High School	Springfield, OR	5/21/98	CC/MJ/VP/WaPo	Yes	4	25	29	50	No	3
131. Westside Middle School	Jonesboro, AR	3/24/98	CC/MJ/VP/WaPo	Yes	5	10	15	26	No	9/10
132. Connecticut Lottery	Newington, CT	3/6/98	CC/MJ/VP/WaPo	Yes	4	0	4	5	Yes	1
133. Caltrans Maintenance Yard	Orange, CA	12/18/97	CC/MJ/VP/WaPo	Yes	4	2	6	144	Yes	1
134. Erie Manufacturing	Bartow, FL	12/3/97	VP	-	4	0	4	12 ^{ag}	-	-
135. R.E. Phelon Company	Aiken, SC	9/15/97	CC/MJ/VP/WaPo	No	4	3	7	-	No	1
136. News and Sentinel	Colebrook, NH	8/20/97	VP/WaPo	-	4	4	8	-	-	2
137. Fire Station	Jackson, MS	4/25/96	VP/WaPo	-	5	3	8	-	-	3

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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
138. Fort Lauderdale	Fort Lauderdale, FL	2/9/96	CC/MJ/VP/WaPo	No	5	1	6	14 ^{ah}	Yes	2
139. Little Chester Shoes	New York, NY	12/19/95	VP/WaPo	Yes	5	3	8	-	-	1
140. Piper Technical Center	Los Angeles, CA	7/19/95	CC/VP/WaPo	Yes	4	0	4	-	-	-
141. Walter Rossler Company	Corpus Christi, TX	4/3/95	CC/MJ/VP/WaPo	No	5	0	5	-	Yes	2
142. Puppy creek	Hoke County, NC	12/31/94	VP	-	5	1	6	-	-	-
143. Air Force Base	Fairchild Base, WA	6/20/94	CC/MJ/VP/WaPo	Yes	4	23	27	50 ^{ai}	Yes	1
144. Chuck E. Cheese	Aurora, CO	12/14/93	CC/MJ/VP/WaPo	No	4	1	5	-	-	1
145. Long Island Railroad	Garden City, NY	12/7/93	CC/MJ/VP/WaPo	Yes	6	19	25	30	Yes	1
146. Unemployment Office	Oxnard, CA	12/2/93	VP/WaPo	-	4	4	8	-	-	-
147. Family Fitness Club	El Cajon, CA	10/14/93	VP/WaPo	-	4	0	4	-	Yes	1
148. Luigi's Restaurant	Fayetteville, NC	8/6/93	CC/MJ/VP/WaPo	No	4	8	12	-	Yes	3
149. Washington County Bar	Jackson, MS	7/8/93	WaPo	-	5	0	5	-	-	1
150. 101 California Street	San Francisco, CA	7/1/93	CC/MJ/VP/WaPo	Yes	8	6	14	75	No	3
151. Card club	Paso Robles, CA	11/8/92	VP/WaPo	-	6	1	7	-	-	1
152. Watkins Glen	Watkins Glen, NY	10/15/92	CC/MJ/VP/WaPo	No	4	0	4	-	Yes	1
153. Lindhurst High School	Olivehurst, CA	5/1/92	CC/MJ/VP/WaPo	No	4	10	14	-	Yes	2
154. Phoenix	Phoenix, AZ	3/15/92	VP	-	4	0	4	-	-	-
155. Royal Oak Postal	Royal Oak, MI	11/14/91	CC/MJ/VP/WaPo	Yes	4	4	8	-	Yes	1
156. Restaurant	Harrodsburg, KY	11/10/91	VP/WaPo	No	4	0	4	6 ^{aj}	No	1
157. University of Iowa	Iowa City, IA	11/1/91	CC/MJ/VP/WaPo	No	5	1	6	-	Yes	1
158. Luby's Cafeteria	Killeen, TX	10/16/91	CC/MJ/VP/WaPo	Yes	23	20	43	100	Yes	2
159. Post office	Ridgewood, NJ	10/10/91	VP/WaPo	Yes	4	0	4	-	-	2
160. GMAC	Jacksonville, FL	6/18/90	CC/MJ/VP/WaPo	Yes	9	4	13	14	Yes	2
161. Standard Gravure Corporation	Louisville, KY	9/14/89	CC/MJ/VP/WaPo	Yes	8	12	20	21	Yes	5
162. Stockton Schoolyard	Stockton, CA	1/17/89	CC/MJ/VP/WaPo	Yes	5	29	34	106	Yes	2
163. Montefiore School	Chicago, IL	9/22/88	VP/WaPo	No	4	2	6	-	-	1
164. Old Salisbury Road	Winston-Salem, NC	7/17/88	VP/WaPo	-	4	5	9	-	-	1
165. ESL	Sunnyvale, CA	2/16/88	CC/MJ/VP/WaPo	No	7	4	11	-	Yes	7

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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
166. Shopping Centers	Palm Bay, FL	4/23/87	CC/MJ/VP/WaPo	Yes	6	14	20	40 ^{ak}	Yes	3
167. United States Postal Service	Edmond, OK	8/20/86	CC/MJ/VP/WaPo	No	14	6	20	-	Yes	3
168. Anchor Glass Container Corporation	South Connellsville, PA	3/16/85	VP/WaPo	No	4	1	5	-	-	1
169. Other Place Lounge	Hot Springs, AR	7/24/84	VP/WaPo	No	4	1	5	-	-	1
170. San Ysidro McDonald's	San Ysidro, CA	7/18/84	CC/MJ/VP/WaPo	Yes	21	19	40	257	Yes	3
171. Dallas Nightclub	Dallas, TX	6/29/84	CC/MJ/VP/WaPo	Yes	6	1	7	-	No	1
172. Alaska Mining Town	Manley Hot Springs, AK	5/17/84	VP/WaPo	No	7	0	7	-	-	1
173. College Station	College Station, TX	10/11/83	VP	-	6	0	6	-	-	-
174. Alaska Back-County	McCarthy, AK	3/1/83	VP/WaPo	-	6	2	8	-	-	2
175. Upper West Side Hotel	New York, NY	2/3/83	VP	No	4	1	5	-	-	1
176. The Investor	Noyes Island, AK	9/6/82	WaPo	-	8	0	8	-	-	1
177. Welding Shop	Miami, FL	8/20/82	MJ/VP/WaPo	No	8	3	11	-	Yes	1
178. Western Transfer Co.	Grand Prairie, TX	8/9/82	VP/WaPo	-	6	4	10	-	-	3
179. Russian Jack Springs Park	Anchorage, AK	5/3/82	VP/WaPo	-	4	0	4	-	No	1
LCM Avg. (1982-2019):					10	17	27	103		
Non-LCM Avg. (1982-2019):					6	3	9	16		
LCM Avg. (1982-Oct. 2022):					10	16	25	102		
Non-LCM Avg. (1982-Oct. 2022):					6	3	9	16		

Notes and Sources:

Public Mass Shootings from Mother Jones ("US Mass Shootings, 1982-2022: Data from Mother Jones' Investigation," updated October 14, 2022). MJ indicates a mass shooting identified by Mother Jones.

The Citizens Crime Commission of New York City ("Mayhem Multiplied: Mass Shooters and Assault Weapons," February 2018 update, and "Citizens Crime Commission of New York City, Mass Shooting Incidents in America (1984-2012)," accessed June 1, 2017). CC indicates a mass shooting identified by Citizens Crime Commission of New York City data.

The Washington Post ("The Terrible Numbers That Grow With Each Mass Shooting," updated May 12, 2021). WaPo indicates a mass shooting identified by The Washington Post.

The Violence Project ("Mass Shooter Database," updated May 14, 2022). VP indicates a mass shooting identified by the Violence Project.

^a Large capacity magazines are those with a capacity to hold more than 10 rounds of ammunition. Stories from Factiva and Google searches reviewed to determine whether an LCM was involved.

^b Offender(s) are not included in counts of fatalities and injuries. Stories from Factiva and Google searches reviewed to determine number of fatalities and injuries.

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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)

^c Offender(s) are not included in counts of fatalities and injuries. Stories from Factiva and Google searches reviewed to determine number of fatalities and injuries.

^d Except where noted, all data on shots fired obtained from CC.

^e The determination of whether guns were obtained legally is based on Mother Jones and Washington Post reporting.

ba "This is the norm in our country': Highland Park Mayor speaks to Senate committee about gun violence," *CBS Chicago*, July 20, 2022.

bb MJ reported "fewer than 10" injuries for this incident.

bc "Update: Man among those killed held door to allow others to escape, Tulsa police chief says," *TulsaWorld*, June 2, 2022.

bd "The gunman in Uvalde carried more ammunition into Robb Elementary School than a U.S. soldier carries into combat," *CBS News*, May 27, 2022.

be "Uvalde gunman legally bought AR rifles days before shooting, law enforcement says," *The Texas Tribune*, May 25, 2022.

bf "Buffalo shooting suspect says his motive was to prevent 'eliminating the white race'," *NPR*, June 16, 2022.

bg "Sacramento Church Mass Shooting Follows Disturbing Trend of Domestic Violence, Mass Shooting Connection; Rise of Ghost Guns," *Everytown*, March 7, 2022.

bh "Oxford High School shooter fired 30 rounds, had 18 more when arrested, sheriff says," *Fox2Detroit*, December 1, 2021.

bi "Father of suspected Oxford High School shooter bought gun 4 days before shooting," *Fox 2 Detroit*, December 1, 2021.

bj "VTA shooter fired 39 rounds during attack; carried 32 high-capacity magazines," *KTVU Fox 2*, May 27, 2021.

bk "Sam Cassidy legally owned guns used in San Jose VTA shooting: Sheriff," *Kron4*, May 28, 2021.

bl "Colorado Springs shooter who killed 6 at party had "displayed power and control issues," police say," *The Denver Post*, May 11, 2021.

bm "Indianapolis FedEx Shooter Who Killed 4 Sikhs Was Not Racially Motivated, Police Say," *NPR*, July 28, 2021.

bn "Police Investigate Three Separate Fatal Shooting Incidents In Baltimore County," *Baltimore County Government Website*, March 29, 2021.

bo "Atlanta Shooting Suspect Bought Gun on Day of Rampage," *Courthouse News*, March 26, 2021.

bp "Search warrant reveals new information in Springfield Kum & Go shooting," *Springfield News-Leader*, April 8, 2020.

bq "There was no warning this was going to happen,' Miller shooting witnesses told investigators," *WISN 12 News*, November 24, 2020.

br "Milwaukee Miller brewery shooting: Six Molson Coors workers, including shooter, dead in rampage," *Milwaukee Journal Sentinel*, February 26, 2020.

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1982 – October 2022

Case	Location	Date	Source	Large Capacity Mag. ^a	Fatalities ^b	Injuries ^c	Total Fatalities & Injuries ^c	Shots Fired ^d	Gun(s) Obtained Legally? ^e	Offender(s)' Number of Guns
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)

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Exhibit B
Public Mass Shootings Data
1982 – October 2022

Case	Location	Date	Source	Large Capacity Mag. ^a	Fatalities ^b	Injuries ^c	Total Fatalities & Injuries ^c	Shots Fired ^d	Gun(s) Obtained Legally? ^e	Offender(s)' Number of Guns
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)

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